SMAILBEGOVIC, Fethulah, dr inz., prof., (Sarajevo, Vuka Karadzica 123)

Realization of the design, and determination of geometric elements, for the construction of a hyperboloid cooling tower. Tehnika Jug 18 no.9:Suppl.:Gradevinarstvo 17 no.9:1641-1647 S '63.

1. Visa geodetska skola, Sarajevo.

[illegible], M. [illegible]; N[illegible]KOV, [illegible], SMA[illegible]

Equipment for the mechanization of auxiliary operations in stopes. Trudy Inst. gor. dela AN Kazakh. SSR 17:113-118 '65.

(MIRA 18:9)

JANUSKEVICIUS,Z., prof.; SMAILYS,A., med. m. kand.

Heart massage. Sveik. apsaug. 8 no.4:20-24 Ap'63.

1. Kauno Valst. Medicinos institutas.

SMAILYS,A., med.m.kand.

Unfavorable effect of the transfusion of citrated blood on cardiac activity. Sveik. apsaug. 8 no.2:48 F'63.

1. Kauno Medicinos instituto hospitalines chirurgijos katedra.

HELLER, Jiri; SMAJCL, Frantisek

Sealants as a substitute for press mounting of antifriction bearings. Stroj vyr 12 no. 5:344-350 My '64.

1. Narodi National Enterprise, zavod 6, Ceska Lipa.

SMAJIC, N.; DOBOVISEK, F.

Mechanism of sintering ferrous oxides. p. 241.

RUDARSKO-METALURSKI ZBORNIK. (Ljubljana. Univerza. Fakulteta za rudarstvo, metalurgijo in kemijsko tehnologijo. Oddelek za rudarstvo in metalurgijo) Ljubljana, Yugoslavia, No. 3, 1958.

Monthly List of East European Accessions (EEAI) LC, Vol. 8, no. 6, June 1959.

Uncl.

SMAJIC, N.

"Atlas of defects in casting." 2d ed. Prepared by the Sub-Committee T. S. 9 of the Technical Council. Reviewed by N. Smajic. Rud met zbor no.1:53-54 '62.

SMAJIC, N.

"Nonequilibrium thermodynamics" by Donald D. Fitts.
Reviewed by N. Smajic. Rud met zbor no.3:289 '62.

SMAJIC, N.

"Mathematical methods for engineers and technologists" by P.I. Romanovski [Romanovskiy, Pavel Ignat'yevich]. Reviewed by N. Smajic. Rud met zbor no.3:291-292 '62.

SMAJIC, N.

"Metallurgical principles for engineers. The control, manufacture, manipulation, and use of metals" by J.G. Tweeddale. Reviewed by N. Smajic. Rud met zbor no.3:292 '62.

DOBOVISEK, Bogomir, dr. ing., docent (Ljubljana); SMAJIC, Nijaz, ing. (Ljubljana)

Analysis of the influence of physical parameters of samples on the value of the constant ϵ''_s. Rud met zbor no.2:161-174 '61.

1. Department of Mining and Metallurgy of the Faculty of Natural Sciences and Technology of the University in Ljubljana, Ljubljana, Askerceva 20; member of Editorial Committee, "Rudarsko-metalurski zbornik; Mining and Metallurgy Quarterly" (for Dobovisek)
2. Metalurski institut, Ljubljana, Lepi pot 11 (for Smajic).

Quantitative determination of activity of pepsin by cup-plate method. Leszek Krówczyński and Anna Smaklewicz (Acad. Med., Lublin, Poland). *Acta Polon. Pharm.* 14, 41–4(1957); cf. Speyer, *C.A.* 47, 10049e.—A method for the assay of pepsin (I) is described which is based on the diffusion of I on agar-casein gels. The diams. of zones of digested protein are directly proportional to the content of I. The latter is obtained graphically from a calibration curve. Average error: ±4% of total I. Presence of tanning agents interferes. The proteolytic activity of gastric juices was detd. by this method. Andrew T. Guttmann

DMOWSKI, Gustaw; SMAJKIEWICZ, Ludwik

Bullous emphysema in the course of staphylococcal pneumonia. Polski tygod. lek. 13 no.52:2124-2128 29 Dec 58.

1. (Z I Kliniki Chorob Wewnetrznych; kierownik; prof. dr med. M. Kedra i z Zakladu Radiologii A. M. w Lublinie; kierownik: prof. dr med. K. Skorzynski). Adres: Lublin, i Klin. Chor. Wewn.

(EMPHYSEMA, PULMONARY, case reports
bullous, assoc, with micrococcal bronchopneumonia (Pol))
(BRONCHOPNEUMONIA, case reports
micrococcal, assoc. with bullous emphysema (Pol))
(MICROCOCCAL INFECTIONS, compl.
bullous emphysema assoc. with micrococcal bronchopneumonia (Pol))

KRYNSKI, Marian; SMAJKIEWICZ, Ludwik

A case of gastric bezoar. Polski tygod.lek.15 no.6:229-230 8 F '60.

1. Z II Kliniki Chirurgicznej A.M. w Lublinie; kierownik: prof. dr.med. Felika Skubiszewski i z Zakladu Radiologii A.M. w Lublinie; kierownik; prof.dr.med. Kazimierz Skorzynski.
(BEZOARS case reports)

KOROLKO, Andrzej; SMAJKIEWICZ, Ludwik

A case of abscess of the anterior mediastinum following dental infection. Polski tygod. lek. 16 no.49:1899-1901 4 D '61.

1. Z I Kliniki Chorob Wewnetrznych A.M. w Lublinie; kierownik: prof dr med. Mieczyslaw Kedra i z Zakladu Radiologii A.M. w Lublinie; kierownik: z-ca prof. dr med. Kazimierz Skorzynski.
(MEDIASTINUM dis) (ABSCESS etiol) (TEETH dis)

POLAND

PAPLINSKI, Zbigniew, SMAJKIEWICZ, Ludwik and KLAUT, Kazimierz, First Surgical Clinic (I Kliniki Chirurgicznej) (Director: Prof. Dr. Tadeusz JACYNA-ONYSZKIEWICZ) and the Department of Radiology (Zakład Radiologii) (Head: Docent, Dr. Mariusz SKOWRONEK) both at the AM [Akademia Medyczna, Medical Academy] in Lublin.

"Paget-Schrotter Syndrome. Report of Four Cases."

Warsaw, Polski Tygodnik Lekarski, Vol 18, No 3, 14 Jan 63, pp 103-106.

Abstract: [Authors' English summary modified] Symptoms leading to diagnosis of the syndrome are described. Possible etiology suggested in only one case. Standard treatment restored use of limb, but did not diminish its enlargement. There are 8 references, of which 5 are Polish and 3 are English.

1/1

[redacted]

A case of pulmonary aspergilosis in the course of [redacted] Christian disease. Pol. tyg. lek. 19 no.27:1421-1424 5 Jul 64

1. Z Zakładu Radiologii Akademii Medycznej w Lublinie (Kierownik: doc. dr. med. K. Skorzyński), z Kliniki Ftyzjatrycznej Akademii Medycznej w Lublinie (Kierownik: doc. dr. med. [redacted]) i z Zakładu Anatomii Patologicznej Akademii Medycznej w Lublinie (Kierownik: prof. dr. med. St.Mahrburg).

FLORKIEWICZ Henryk; SMAJKIEWICZ, Ludwik

Pancreatic calcification. Pol. tyg. lek. 20 no.5:181-182 1 F'65.

1. Z I Kliniki Chorob Wewnetrznych Akademii Medycznej w Lublinie (kierownik: prof. dr. med. Mieczyslaw Kedra) i z Zakladu Radiologii Akademii Medycznej w Lublinie (kierownik: doc. dr. med. Kazimierz Skorzynski).

MYSAKOWSKA, Helena; PIETRON, Eugeniusz; SREDNICKA, Danuta; GRODZKI, Stanislaw; CYGAN, Edward; ROZYNSKA, Maria; SMAJKIEWICZ, Ludwik

Results of examinations of students 18 months after the conclusion of chemoprophylaxis. Gruzlica 33 no.7:601-604 Jl '65.

1. Z Katedry Ftizjatrii AM w Lublinie (Kierownik: doc. dr. H. Mysakowska) i z Akademickiej Poradni Przeciwgruzliczej w Lublinie (Kierownik: lek. E. Pietron).

Commutator brushes for high altitudes. Adolf Smaller. *Pokroky prûmysl. mat., Sborník konf., Brno* 1953, 313–23 (Pub. 1954).—Brushes for collectors, commutators, and other elec. machines used in high altitudes present special problems owing to the tendency of the brush to break down into a fine powder under lowered pressures. It is shown how such brushes can be prepd. by the aid of powder metallurgy from a mixt., the main ingredients of which are Cu_2O and C, and a contact film must be applied to those brushes, which contains as essential ingredient MoS_2. 47 references. W. I—

Distr: 4E2d

SMAJIER, A. NOVOTNY, V.

Technical equipment of a short-circuit testing station. p. 9.

(Czechoslovak Heavy Industry. No. 5, 1957. Prague, Czechoslovakia)

SO: Monthly List of East European Accessions (EEAL) LC, Vol. 6, no. 10, October, 1957. Uncl.

SMAJLER, A. KA[illegible]IK, J. KOH[illegible]UT, J.

Methods of control and measuring in short-circuit tests. p. 24.

(Czechoslovak Heavy Industry. No. 5, 1957. Prague, Czechoslovakia)

SO: Monthly List of East European Accessions (EEAL) LC, Vol. 6, no. 10, October 1957. Uncl.

SMAK, Yu.; KRUSHEVSKIY, A.

Observations of CO Lacertae. Per. zvezdy 10 no.5:329-330 '55. (MLRA 9:9)

1. Filial Varshavskoy observatorii v Ostrovike.
(Stars, Variable)

SMAK, J.

"The perpendicular distribution of interstellar calcium in relation to the area of the galaxy."

p. 15 (Postepy Astronomii) Vol. 6, no. 1, Jan./Mar. 1956
Krakow, Poland

SO: Monthly Index of East European Accessions (EEAI) LC. Vol. 7, no. 4, April 1958

SMAK, J.

"Photometric studies of the youngest constellations."

p. 17 (Postepy Astronomii) Vol. 6, no. 1, Jan./Mar. 1956
Krakow, Poland

SO: Monthly Index of East European Accessions (EEAI) LC. Vol. 7, no. 4, April 1958

SMAK, J.

"The classification of non-stable stars of the T Tauri type."

p. 22 (Postepy Astronomii) Vol. 6, no. 1, Jan./Mar. 1956
Krakow, Poland

SO: Monthly Index of East European Accessions (EEAI) LC. Vol. 7, no. 4, April 1958

12 13

Distribution of interstellar calcium. J. Smak (Univ. Warsaw). *Acta Astron.* (Warsaw) 8, 43–7(1958)(in English). From measurements of equiv. widths of K lines of Ca, on 189 stars of known distances, the d., D, in nos. of Ca ions/cc. of interstellar space, was calcd., the observed intensities being corrected for growth effects. J. Stecki

CR

SMAK, J.

Occasional observations of eclipsing variables. Acta astronom 9 no.1:52 '59.

1. Astronomical Observatory, University, Warsaw, and Institute of Astronomy, Polish Academy of Sciences, Warsaw.

Mal, J.

Physical problems of stars in open groups. p. 110

[illegible] (Publ.) (Polska Akademia Nauk. Komitet Astronomii) Krakow, Poland, Vol. 7, no. 3, Apr./June 1959.

Monthly list of East European Accession (EEAI) LC, Vol. 9, no. 1, Jan. 1960.

Uncl.

Mak, J.

Star populations; the Week of Studies of the Vatican Academy, May 1957. p. 133

[illegible] (PAN). (Polska Akademia Nauk. Komitet Astronomii) Krakow, Poland.
Vol. 9, no. 1, appr./June 1959.

Monthly list of East European Accession (EEA) LC, Vol. 9, no. 1, Jan. 1960.

Uncl.

SMAK, Josef

The problem of the physics of stars in globular clusters. Postepy astronom
8 [illegible]

89684

P/011/60/031/008/002/002
B115/B217

3,1540(1062,1128,1184)

AUTHOR: Smak, Józef (Warszawa)

TITLE: Life of the Sun. I

PERIODICAL: Urania, v. 31, no. 8. 1960, 230-235

TEXT: The author of the present paper reminds the reader that coal, which we owe to the Sun, and the Sun itself, are two main sources of energy. The potential menace to human life would be the Sun's extinction on the one hand, and an increase of the solar energy, on the other. An attempt is made here to outline the Sun's life in past and future, and to draw resulting conclusions for life on the Earth. It is pointed out that all numerical data on stellar evolution are based upon the physical data on the efficacy, the extent, and the rate of atomic reactions which are known to form the energy source of the stars and the principal cause of their evolution. For the energy production of the Sun, the proton cycle is written and the mass loss connected therewith is explained. Thus, the solar mass is consumed uninterruptedly at a rate of 4 million tons each second. Within one billion of years, however, this will amount to merely the $6.6 \cdot 10^{-14}$th part of the

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P/011/60/031/008/002/002
B115/B217

Life of the Sun. I

Sun's mass. Since the atomic reactions take place chiefly in the Sun's interior, the Sun will contain always less hydrogen and always more helium in the course of time. The problem as to whether the hydrogen deficiency and the helium excess in the interior of the stars will be balanced by the mixing of matter in the course of time cannot be answered directly. According to an estimation, however, this problem has no practical importance. The second problem, the stability of the solar mass, is the subject of several theories. The Soviet astrophysicists Fesenkov and Masevich have set up an evolution theory of stars, according to which all stars lose their matter which in the interior undergoes a complete mixing process. The latter assumption is at present considered to be wrong. The first point as well, the effect of corpuscular radiation, can be neglected, since estimations based both on solar observations and on geophysical data prove that compared with the total mass, the Sun suffers a merely inconsiderable loss. The same holds true for other stars as well. It is only at the stage of the red giants that the loss of mass becomes important, as their loss of matter is noticeable. By its assumption of the mass remaining unchanged the evolution theory reproduces the actual stellar state best, whereas other

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B115/B217

Life of the Sun. I

theories are not able to explain certain facts. On the strength of the foregoing and with reference to S. Piotrowski's paper on the stellar structure, the author has developed his theory on the evolution of the Sun. Age "zero" was the moment when temperature and density in the shrinking protosun were sufficient to release the nuclear reaction. This was the beginning of a new energy source. From then on the Sun became luminous due to a modification of its chemical interior, involving changes of its other physical properties as well Theorists are now faced by the task of calculating the rate of the growth of heterogeneity in the Sun's interior on the strength of the physical data and of then designing a model of such a heterogeneous ball. A number of models illustrating the growing heterogeneity could, when compared to one another, represent the changes of the chemical composition and the physical parameters (brightness, extent, effective temperature) at different moments of the existence of the Sun. The author then repeats his opinion, that the evolution theory, although still young, is to be regarded as the safest and the most accurate of all theories of modern astrophysics. A judgment of the Sun's future on the basis of this theory will be as safe as on the basis of experimental data. J. Gadomski and S. Piotrowski are mentioned. There is 1 figure.

Card 3/3

SMAK, J.

Close binaries I; on the physical nature of R CMa stars. Acta astronom 11 no.3:171-179 '61.

1. Astronomical Observatory, University, Warsaw and Institute of Astronomy, Polish Academy of Sciences, Warsaw.

S/269/63/000/004/010/030
A001/A101

AUTHOR: Smak, J.

TITLE: A repeated discussion of the relationship P - (B-V) for variable stars of the RR Lyrae type in the globular star cluster M3

PERIODICAL: Referativnyy zhurnal, Astronomiya, no. 4, 1963, 32, abstract 4.51.301 ("Postępy astron.", 1962, v. 10, no. 1, 87, Polish)

TEXT: The values of pulsation constant Q were calculated for two subtypes of RR Lyrae variable stars, ab and c. The results of calculations warranted the following conclusions: 1) the observed values of Q_{ab} and Q_c agree with the values obtained from the models which are the best in the physical and evolutionary sense; 2) the Q_{ab}/Q_c ratio does not confirm a conjecture by M. Schwarzschild that subtype c stars are pulsating in the first overtone.

W. Wiśniewski

[Abstracter's note: Complete translation]

Card 1/1

SMAK, J.

The theoretical period frequency function for the classic Cepheids. Postepy astronom 10 no.2:151-155 '62.

SMAK, J.

The internal structure of the components of close binary systems of the R Canis Major type. Postepy astronom 10 no.2:155-156 '62.

SMAK, J.

The evolutionary significance of the subgiants in the close binary systems. Postepy astronom 10 no.2:156-158 '62.

SMAK, J.

On the shortcomings of the application of the Schott UG 2 filter for photometry UBV. Postepy astronom 10 no.3:253-256 '62.

SMAK, J.

Close binaries. II. Acta astronom 12 no.1:28-54 '62.

1. Astronomical Observatory, University, Warsaw, and Institute of Astronomy, Polish Academy of Sciences, Warsaw.

SMAK, J.

A theoretical period frequency function of classical Cepheids.
Acta astronom 12 no.2:93-101 '62.

1. Astronomical Observatory, Warsaw University, and Astronomical Institute, Polish Academy of Sciences, Warsaw.

SMAK, Jozef

Luminosities and colors of the Cepheids. Postepy astronom 11 no.2:105-122 '63.

SMAK, J.

Age of the oldest stellar clusters. Postepy astronom 11 no.4: 293-299 '63.

GRZEDZIELSKI, Stanislaw; SMAK, Jozef (Warszawa)

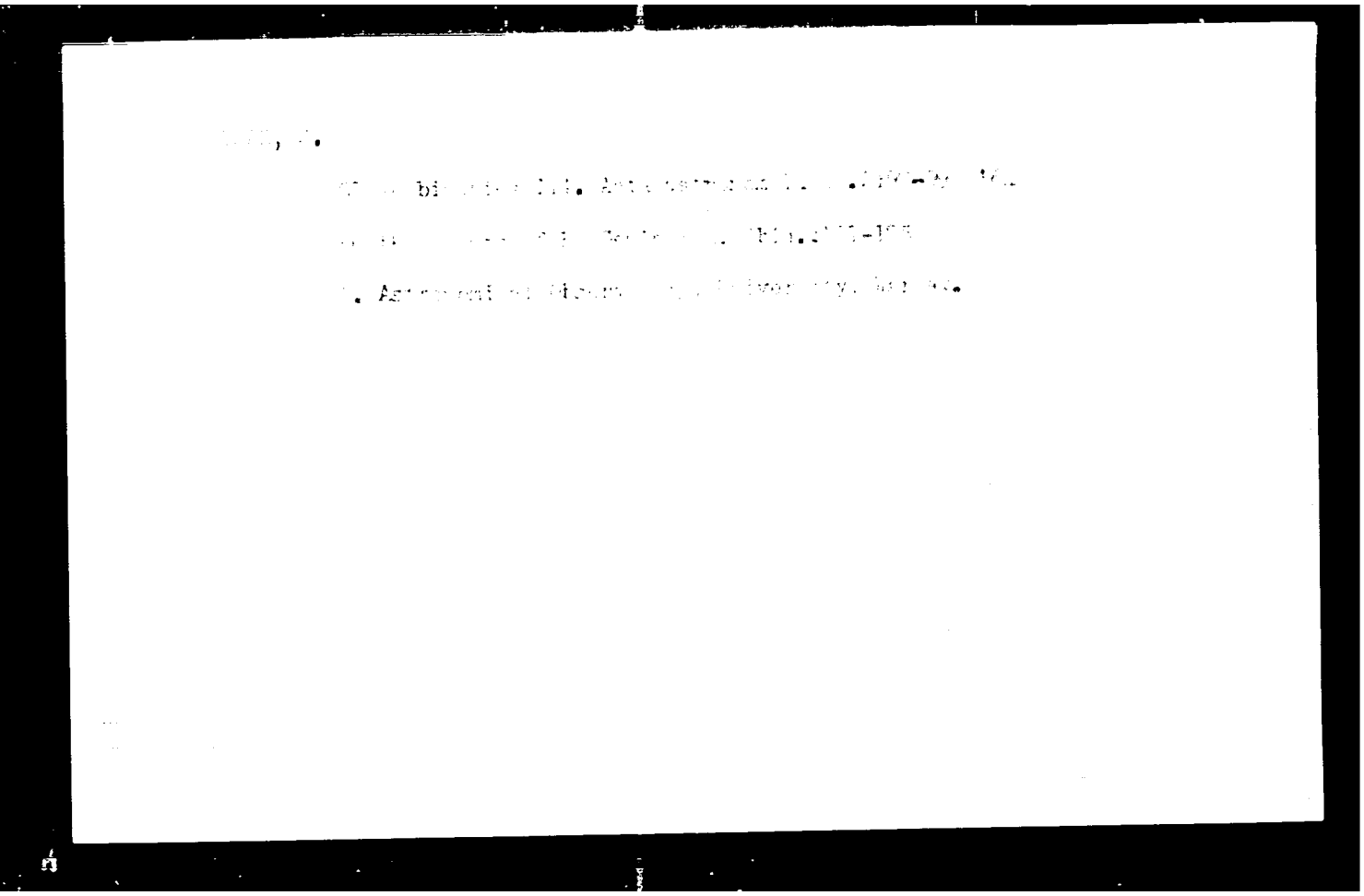
Birth and death of stars. Wszechswiat no.10:225-229 O '63.

SMAK, J.

Photoelectric and spectroscopic observations of variable long-period stars. Postepy astronom 12 no.1:22-28 '64.

SMAK, J.

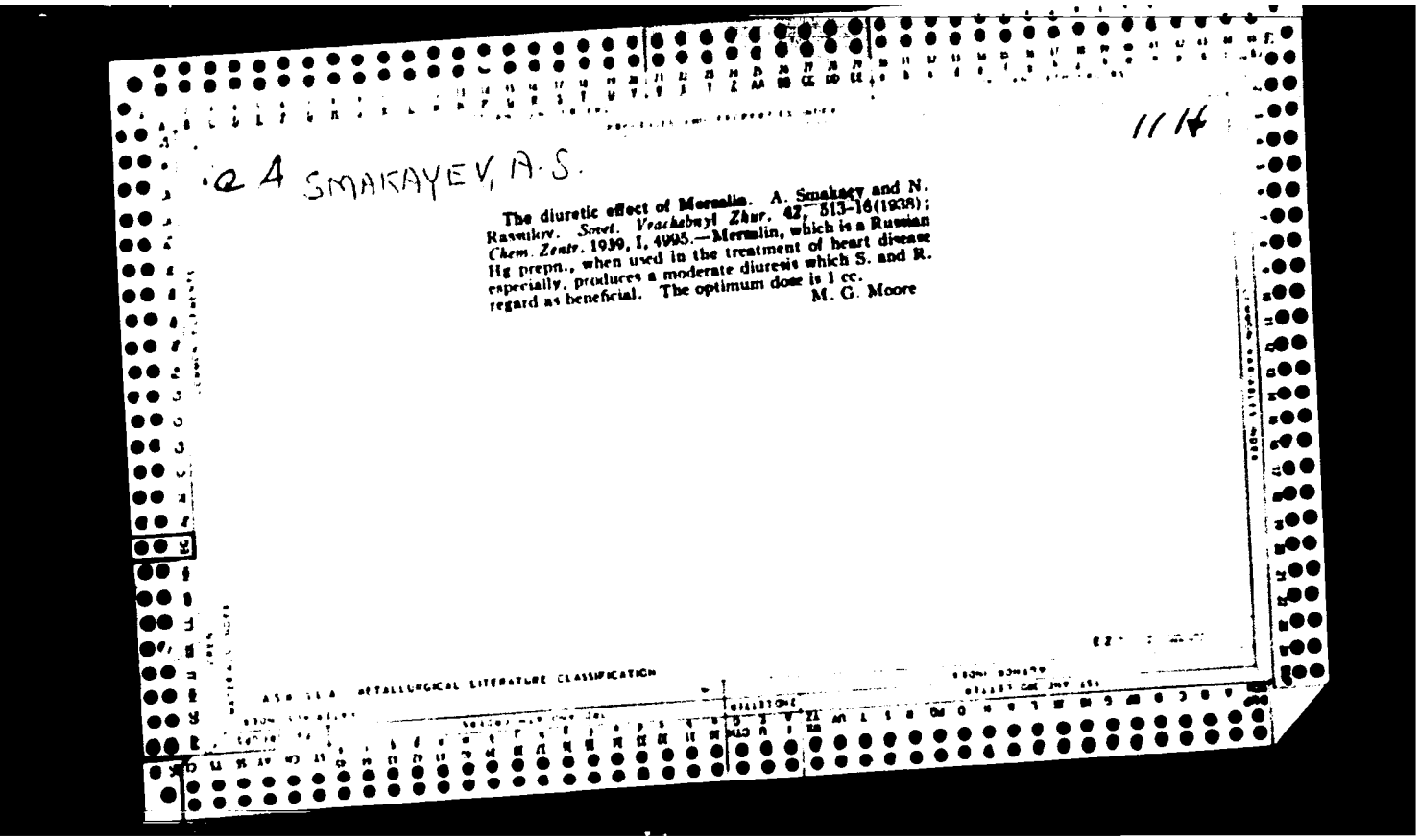
Objects of 3C 48 type. Postepy astronom 12 no.3:212-215
'64.



GRIGORYAN, K.A.; SHAK, Yu.M.

Polarization observations of stars in clusters NGC 2244 and NGC 2264. Soob.Biur.obser. no.28:3-7 '60. (MIRA 14:3)

1. Byurakanskaya astrofizicheskaya observatoriya Akademii nauk Armyanskoy SSR i Institut astronomii Pol'skoy Akademii nauk.
(Stars—Clusters)



1114

QA SMAKAYEV, A.S.

The diuretic effect of Mersalin. A. Smakaev and N. Rassukev. *Sovet. Vrachebnyi Zhur.* 42, 513-16(1938); *Chem. Zentr.* 1939, I, 4995.—Mersalin, which is a Russian Hg prepn., when used in the treatment of heart disease especially, produces a moderate diuresis which S. and R. regard as beneficial. The optimum dose is 1 cc.
M. G. Moore

SMAKAYEV, A.S., kand.med.nauk; FARADZHEV, I.D.

Hemolytic jaundice with hemoglobinuria. Azerb.med.zhur. (MIRA 12:6)
no.3:79-81 Mr '59.

1. Iz Sumgaitskoy gorodskoy bol'nitsy (glavvrach - Sh.Z.Muradov).
(JAUNDICE) (HEMOGLOBINURIA)

SMAKAYEV, A.S.

Comparative evaluation of methods for the treatment of peptic ulcer. Azerb.med.zhur. no.1:72-75 Ja '60. (MIRA 13:5)
(PEPTIC ULCER)

RUSIYA, Zaur; KHURTSILAVA, Gigla; SMAKHARADZE, Kukuri; MIKAYA, Zurab; SIRADZE, Bondo; AVAZASHVILI, Guguli; PIRTSKHALASHVILI, Pavle; TATUASHVILI, Anzor

Search goes on. Sov. profsoiuzy 18 no.5:16-18 Mr '62. (MIRA 15:3)

1. Zavod "Elektroavtomat", g. Tbilisi.
(Tiflis--Labor and laboring classes)

137-1957-12 23305 D

Translation from: Referativnyy zhurnal, Metallurgiya, 1957, Nr 12, p 64 (USSR)

AUTHOR: Smakhtin, L. A.

TITLE: The Measurement of the Partial Vapor Pressures of Gold, Silver, and Copper in Solid Solutions A-P and A-S (Izmereniye partsial'nykh davleniy para zolota, serebra i medi v tverdykh rastvorakh A-P i A-S)

ABSTRACT: Bibliographic entry on the Author's dissertation for the degree of Candidate of Chemical Sciences, presented to the MGU (Moscow State University), Moscow, 1957.

ASSOCIATION: MGU (Moscow State University)

1. Gold-Vapor pressure-Measurement 2. Copper-Vapor pressure-Measurement 3. Silver-Vapor pressure-Measurement

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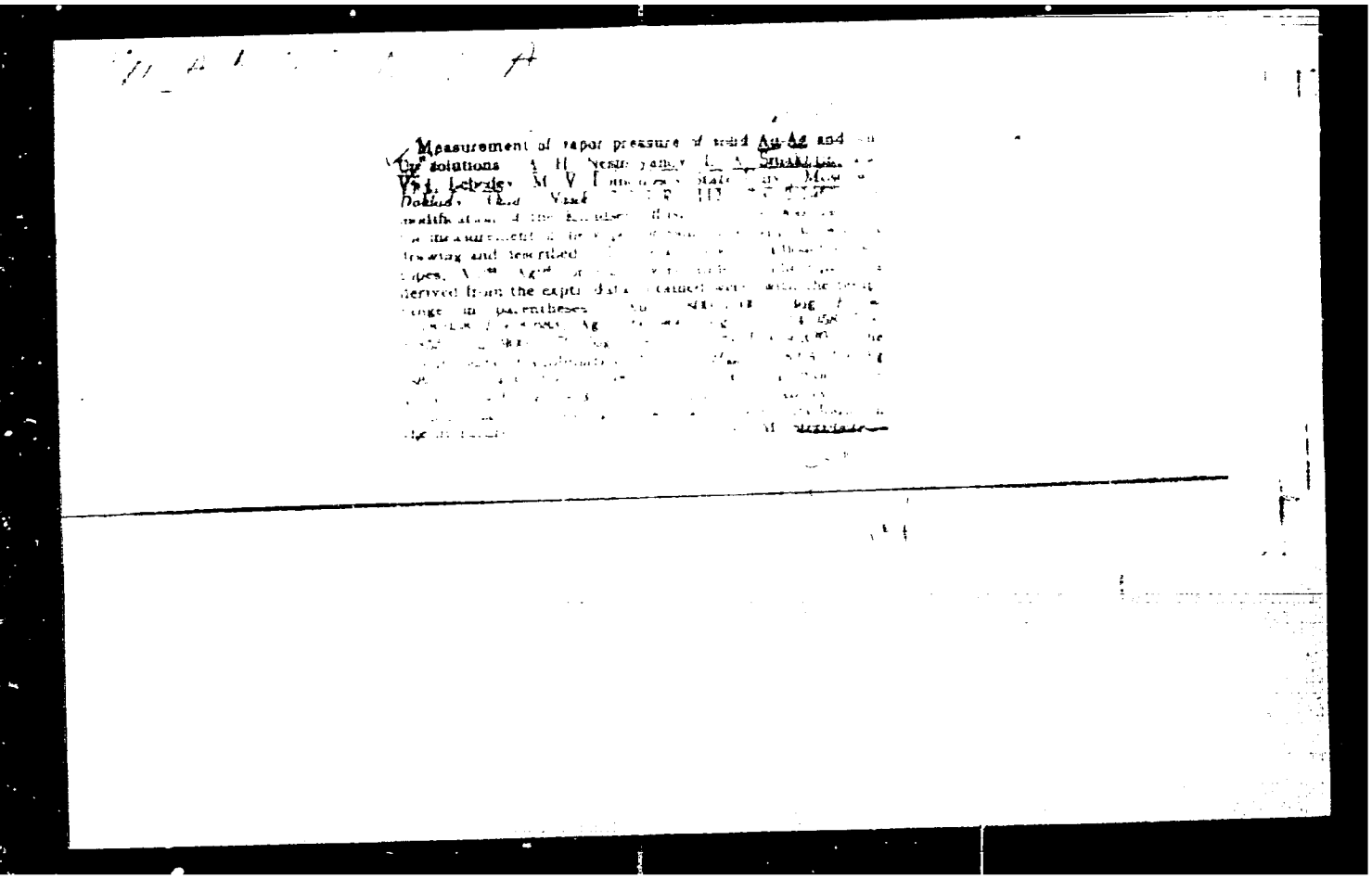

SOV/76-33-2-17/42

AUTHOR: Nesmeyanov, An. N., Smakhtin, L. A., Choporov, D. Ya., Lebedev, V. I.

TITLE: An Investigation Into the Thermodynamics of Solid Solutions of Gold, Silver, and Copper I (Issledovaniye po termodinamike tverdykh rastvorov zolota s serebrom i med'yu I)

PUBLISHED: Zhurnal fizicheskoy khimii, 1959, Vol 33, Nr 2, pp 342 - 348 (USSR)

ABSTRACT: Because the components of solid solutions have such an exceptionally low vapor pressure investigations of the thermodynamic properties of such solutions by measurement of the partial pressure are very difficult. These measurements could be facilitated by the use of radioactive isotopes. In this paper data are given for the vapor pressure of solid Au, Ag, and Cu, since the literature data for the pressure of saturated vapor of these metals are very contradictory. Pure metals (99.9%) and the radioactive isotopes Au^{198}, Ag^{110}, and Cu^{64} were used. The vapor pressure was measured using the effusion method of Knudsen and an appropriate apparatus (Fig 1). The effusion space was produced from molybdenum. From the experi-

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(Ref 11) and in the present paper are in good agreement. The values given by Downing, Edwards and Heriek (Douning, Edwards)(Ref 12) are too high and those by Harteck are too low. The most reliable data for liquid Cu are those given by Hersh. There are 4 figures, 3 tables, and 12 references, 2 of which are Soviet.

ASSOCIATION: Moskovskiy gosudarstvennyy universitet im. M. V. Lomonosova (Moscow State University imeni M. V. Lomonosov)

SUBMITTED: July 9, 1957

SOV/76-33-3-15/41

5(4), 18(6)
AUTHORS: Nesmeyanov, An. N., Smakhtin, L. A., Lebedev, V. I.

TITLE: Investigation of the Thermodynamics of Solid Solutions of Gold With Silver and Copper, II (Issledovaniye po termodinamike tverdykh rastvorov zolota s serebrom i med'yu. II)

PERIODICAL: Zhurnal fizicheskoy khimii, 1959, Vol 33, Nr 3, pp 599 - 606 (USSR)

ABSTRACT: In a previous paper (Ref 1) investigations were carried out on the pressure of saturated vapors of solid Au, Ag, and Cu by means of radioactive isotopes Au^{198}, Ag^{110}, and Cu^{64} according to the Knudsen method. In the present paper experimental results are described concerning the partial pressures of gold, silver and copper in solid solutions. The experimental data (Tables 1,2) were worked out according to the method of the least squares and represented as straight lines $\lg P_i = A + B/T$. The activities in the case of 1250 and 1111°K were calculated from the equations for the pressure of the saturated vapors of the pure metals and the partial

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pressures in the case of Au, Ag, and Cu in the alloys Au-Ag and Au-Cu. By means of the experimentally obtained values of the activity coefficients (Tables 1,2) and the equation according to Gibbs-Duhem both activity coefficients in the concentration range of from 0.2 N_i to 0.8 N_i were

calculated according to the method of successive approximations at graphic integration. Equations on the relation between the activities of the components of the alloys and the temperature in form of linear functions lg a_i - 1/T were

calculated from the values of the activity coefficients for the two above-mentioned temperatures (Tables 3,4); herefrom several thermodynamic partial and integral functions of solid solutions (Tables 5,6) were derived. The majority of the results obtained is in good agreement with the publication data. On comparing the experimental results obtained with the approximations of the theory of solid solutions only a qualitative agreement was to be observed which means a limited applicability of these approximations. The observed excess entropy of mixing is considered to be due to the Variation

Investigation of the Thermodynamics of Solid Solutions of Gold With Silver and Copper.II SOV/76-33-3-15/41

of the oscillation frequency of the atoms in the crystal lattice on the transition metal → alloy. There are 4 figures, 8 tables, and 16 references, 4 of which are Soviet.

ASSOCIATION: Moskovskiy gosudarstvennyy universitet imeni M. V. Lomonosova (Moscow State University imeni M. V. Lomonosov)

SUBMITTED: July 9, 1957

Card 3/3

S/032/60/026/011/001/035
B015/B066

AUTHORS: Rakovskiy, E. Ye., Smakhtin, L. A., and Yakovlev, Yu. V.

TITLE: Determination of Microimpurities in High-purity Antimony by Means of Radioactivation Analysis

PERIODICAL: Zavodskaya laboratoriya, 1960, Vol. 26, No. 11, pp. 1199-1200

TEXT: The radioactivation analysis of antimony according to A. Kulak (Ref. 4) cannot be applied to determine impurities in light elements. The authors describe such a method for the determination of phosphorus, chromium, manganese, copper, zinc, gallium, and arsenic impurities in high-purity samples of antimony. The method consisted of a comparison with standard samples. The sample and the standard were exposed to a neutron flux ($8.7 \cdot 10^{12}$ n/cm^2·sec) for 20-48 h. The elements to be determined were divided into two groups, i.e. Mn, Cr, Zn and Ga on the one hand, and P, Cu, and As on the other. To analyze the former group, the sample is dissolved in aqua regia after irradiation, evaporated, antimony is precipitated with H_2S, the solution is evaporated to dryness

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Determination of Microimpurities in High-purity Antimony by Means of Radioactivation Analysis

S/032/60/026/011/001/035
B015/B066

taken up in hydrochloric acid, and the resulting solution is passed through a column with the Dowex 1-X8 anion exchanger which absorbs Ga and Zn. Ga is then eluted with 1-2 N HCl, Zn with water. Mn and Cr which are not absorbed by the exchanger are precipitated with H_2S in ammoniacal medium as sulfide and hydroxide, respectively, and finally isolated: Mn in the form of $MnNH_4PO_4$, and Cr as barium chromate. In the test for Cu, P, and As, after dissolution of the irradiated sample As is isolated as arsenic bromide, Cu is separated as CuCNS, and the phosphate is isolated as magnesium ammonium phosphate after purification on the КУ-2 (KU-2) cation exchanger. The test samples as well as the standard samples were measured by means of a СИ-2Б (SI-2B) Geiger counter with an accuracy of about ±5%. The following determination accuracies were found: $3 \cdot 10^{-6}$% Mn $3.5 \cdot 10^{-6}$% Cu, $\leq 8 \cdot 10^{-7}$% Zn, $4 \cdot 10^{-5}$% As, $\leq 8 \cdot 10^{-6}$% P, $\leq 5 \cdot 10^{-4}$% Cr and $\leq 3 \cdot 10^{-7}$% Ga. With the separation scheme described radiochemically pure preparations can thus be obtained. There are 4 references, 3 Soviet and 1 British.

Card 2/3

Determination of Microimpurities in High-purity Antimony by Means of Radioactivation Analysis

S/032/60/026/011/001/035
B015/B066

ASSOCIATION: Institut geokhimii i analiticheskoy khimii Akademii nauk SSSR im. V. I. Vernadskogo (Institute of Geochemistry and Analytical Chemistry imeni V. I. Vernadskiy of the Academy of Sciences USSR)

Card 3/3

SMAKHTINA, O.L.

Oncological diseases in women employed in the tobacco industry. Zdravookhr. Kazakh. 23 no.1:27-30 '63 (MIRA 17:2)

1. Iz Kazakhskogo instituta onkologii i radiologii.

SHAKHTINA, I. N.

PETROSOV, O. P., SEMASHKO, S. A., and SHAKHTINA, I. N. "Increased sensitivity to the Kherst reaction and its practical significance for diagnosing epidemic grippe", Voprosy med. virusologii, Issue 1, 1948, p. 181-89.

SO: W-30442, 11 March 53, (Letopis 'nykh Statey, No. 10, 1949).

USSR .

Chem Prophylactic Therapy

Significance of the thymol turbidity test in functional diagnosis of liver. N. K. Rozova and T. G. Smakhtina (Med. Inst., Yaroslav). *Klin. Med.* (U.S.S.R.) 32, No. 8, 70(1954).—L. A. Kashchevskaya's method was used. Several dilns. of a 15% NaCl solns. contg. 1% of serum protein were prepd., the lowest concn. contg. 100 mg. of protein in 1.5% NaCl. One vol. of each diln. was mixed with 3 vols. sulfosalicylic acid, and the resulting turbidities formed the scale of standards. Three cc. of a buffered thymol soln., pH 7.8, were added to the serum to be tested, and the turbidity was compared with the scale of standards. Normal values were 0 to 4–5 units. The Quick-Pytell test (hippuric acid) was more delicate than the thymol and other hepatic tests. However the thymol test was important prognostically, indicating improvement before other tests. It is also important in differential diagnosis, being neg. in most cases of obstructive jaundice and toxic hepatitis and pos. in infectious hepatitis, especially in the acute stage. It is also pos. in cirrhosis of the liver.

A. Mirkin

[illegible], L.F., GAL'KINA, A.G.; YEFREMOV, I.I.; SMAKHTINA, Yu.B.; KOMISSAROVA, M.I., SOVETOVA, L.Ye.; CHISTIKOVA, A.I.; SHARKOVA, A.N.

Effectiveness of ambulatory treatment of cholelithiasis patients at Zheleznovodsk Health Resort. Ster. nauch. rab. vrach. san.-kur. uchr. profsoiuzov no.1:121-125 '64.

(MIRA 18:10)

1. Zheleznodorozhnaya kurortnaya poliklinika (glavnyy vrach I.I. Yefremov).

L 44229-66 EWT(1)/EWP(m) WW

ACC NR: AT6023748 SOURCE CODE: UR/3149/66/000/003/0099/0105

37
B+1

AUTHOR: Palatnik, I. B.; Smakov, Z.

ORG: none

TITLE: The use of methods of an equivalent problem of the thermal conductivity theory for studying the jet discharging from a complex nozzle

SOURCE: Alma-Ata. Kazakhskiy nauchno-issledovatel'skiy institut energetiki. Problemy teploenergetiki i prikladnoy teplofiziki, no. 3, 1966, 99-105.

TOPIC TAGS: heat conductivity theory, complex nozzle, flow field, flow density, gas jet

ABSTRACT: Experimental data on the distribution of the pulsed flow density and enthalpy in the flow field of a submerged, slightly heated jet, issuing from a cross-shaped nozzle is compared with a solution obtained using the method of an equivalent problem of the thermal conductivity theory. It is demonstrated that this method can be used to calculate the flow fields under conditions where other calculation methods can not be applied. Orig. art. has: 5 figures and 8 formulas. [AV]

SUB CODE: 20, 21/ SUBM DATE: none/ ORIG REF: 005/

Card 1/1 MT

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SOV/81-59-12-43164

Translation from: Referativnyy zhurnal. Khimiya, 1959, Nr 12, p 326 (USSR)

AUTHORS: Belyayev, G.I., Smakota, N.F.

TITLE: Effect of Some Surface-Active Additions on the Quality of Primer Enamels

PERIODICAL: Tr. Dnepropetr. khim.-tekhnol. in-ta, 1958, Nr 6, pp 120-130

ABSTRACT: It has been established that additions of small quantities of surface-active substances: metal sulfides (Sb_2S_3, $CuFeS_2$, ZnS, PbS, FeS_2), Cr_2O_3 and chromite ores to boron-free frit considerably improve the wetting and spreading capacities of the primer smelt on steel, reduce the oxidizability of the steel surface during burning of the primer coating and reduce the burnt places in the boron-free primer enamel. The substitution of feldspar during grinding by ground quartz sand with simultaneous addition of metallurgical magnesite powder or ground magnesite or chromomagnesite brick (1.5 - 3.0%) to the dross, positively affects the quality of boron-free and low-boron enamel coatings.

Card 1/1

G. Gerashchenko

BELYAYEV, G.I.; SHAKOTA, N.F.

Effect of steel on certain properties of ground enamels.
Trudy DKHTI no.6:131-143 '58. (MIRA 13:11)
(Enamel and enameling) (Steel)

BELYAYEV, G.I.; SMAKOTA, N.F.

Effect of the crystallization of frit on the properties of enamel primer. Zhur.prikl.khim. 31 no.11:1744-1746 N '58.
(MIRA 12:2)

1. Dnepropetrovskiy khimiko-tekhnologicheskiy institut.
(Frits) (Enamel and enameling)

BELYAYEV, G.I.; SMAKOTA, N.F.

Effect of ferric oxide on the properties of enamel primers with and without boron. Zhur.prikl.khim. 31 no.12:1792-1799 D '58. (MIRA 12:2)

1. Dnepropetrovskiy khimiko-tekhnologicheskiy institut.
(Iron oxides) (Enamel and enameling)

BELYAYEV, G.I., doktor tekhn.nauk; BELYY, Ya.I.; SMAKOTA, N.F.

Effect of clay on some properties of enamel. Stek. i ker. 19 no.6:29-31 Je '62. (MIRA 15:7)
(Enamel and enameling) (Clay)

ACCESSION NR: AT4030807 S/0000/63/000/000/0262/0272

AUTHOR: Belyayev, G. I.; Smakota, N. F.; Verbitskiy, P. G.; Barinov, Yu. D.

TITLE: On the interaction of borosilicate melts with certain metals and oxides

SOURCE: AN UkrSSR. Institut metallokeramiki i spetsial'nykh splavov. Poverkhnostnyye yavleniya v rasplavakh i protsessakh poroshkovoy metallurgii (surface phenomena in liquid metals and processes in powder metallurgy), Kiev, Izd-vo AN UkrSSR, 1963, 262-272

TOPIC TAGS: borosilicate, oxide, vitreous covering, metal ceramic material, silicate, steel, sodium borosilicate glass

ABSTRACT: In this paper the authors studied the process of the reaction of steel with sodium borosilicate glasses of different acidity. It was shown that in compositions of metal glass at high temperatures, a chemical reaction of phases occurs which is accompanied by the solution of the metal, the enrichment of the alloy by its oxides, and a separation of gases which leads to the expansion and formation of a foamy structure near the interphase boundary. It was established that the nature of the silicate melt has a considerable effect on the speed of dissolution of the steel samples; the solubility of steel increases with an increase in the alkalinity

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ACCESSION NR: AT4030807

of the glass. The intensity of the expansion of the borosilicate alloy rises with the increase of the glass alkalinity. Metals have a great effect on the expansion. An insignificant expansion of the alloy was observed in the reaction with nickel, copper, and molybdenum; compositions consisting of glass with powdered iron, cobalt, or chromium additives, expand strongly. It was shown that the solubility of the iron oxides decreases with an increase in the acidity of the glass. In pure boron anhydride, ferric oxide practically does not dissolve. Orig. art. has: 11 figures and 1 table.

ASSOCIATION: Dnepropetrovskiy khimiko-tekhnologicheskiy institut (Dnepropetrovsk Chemical Engineering Institute)

SUBMITTED: 23Nov63 DATE ACQ: 16Apr64 ENCL: 00

SUB CODE: ML NO REF SOV: 004 OTHER: 004

Card 2/2

BELYAYEV, G. I.; SMAKOTA, N. V.

"On connection of EMF, acidity and some properties of enamel glasses containing MeO type oxides of metals."

report submitted for 4th All-Union Conf on Structure of Glass, Leningrad, 16-21 Mar 64.

L 36367-66 EWT(m)/EWP(e)/EWP(t)/ETI IJP(c) WH/JD/WB

ACC NR: AR6012431 SOURCE CODE: UR/0081/65/000/020/M010/M010

41 39 B

AUTHORS: Belyayev, G. I.; Smakota, N. F.

TITLE: Interaction of glasses of the Na_2O - B_2O_3 - SiO_2 system with iron, steel, and other metal oxides 27

SOURCE: Ref. zh. Khimiya, Abs. 20M87

REF SOURCE: Sb. Stekloobrazn. sostoyaniye. T. 3. Vyp. 4. Minsk, 1964, 93-97

TOPIC TAGS: iron, steel, borate glass, solubility, electromotive force, metal oxidation

ABSTRACT: Metal dissolution, enrichment of the melt by its oxides, and gas evolution occur in metal-glass compositions at high temperatures, which can lead to swelling and formation of a foamy structure close to the interphase boundary. It is established that the nature of the silicate melt has a significant effect on the rate of metal dissolution. With an increase in glass alkalinity, the metal corrosion losses increase. The swelling intensity of a borosilicate alloy grows with increased glass alkalinity. At the same time the boiling of the melt depends on the metal: an insignificant increase in the volume of the alloy is observed at the interaction with Ni and Cu. Compositions

27 27 18

Card 1/2

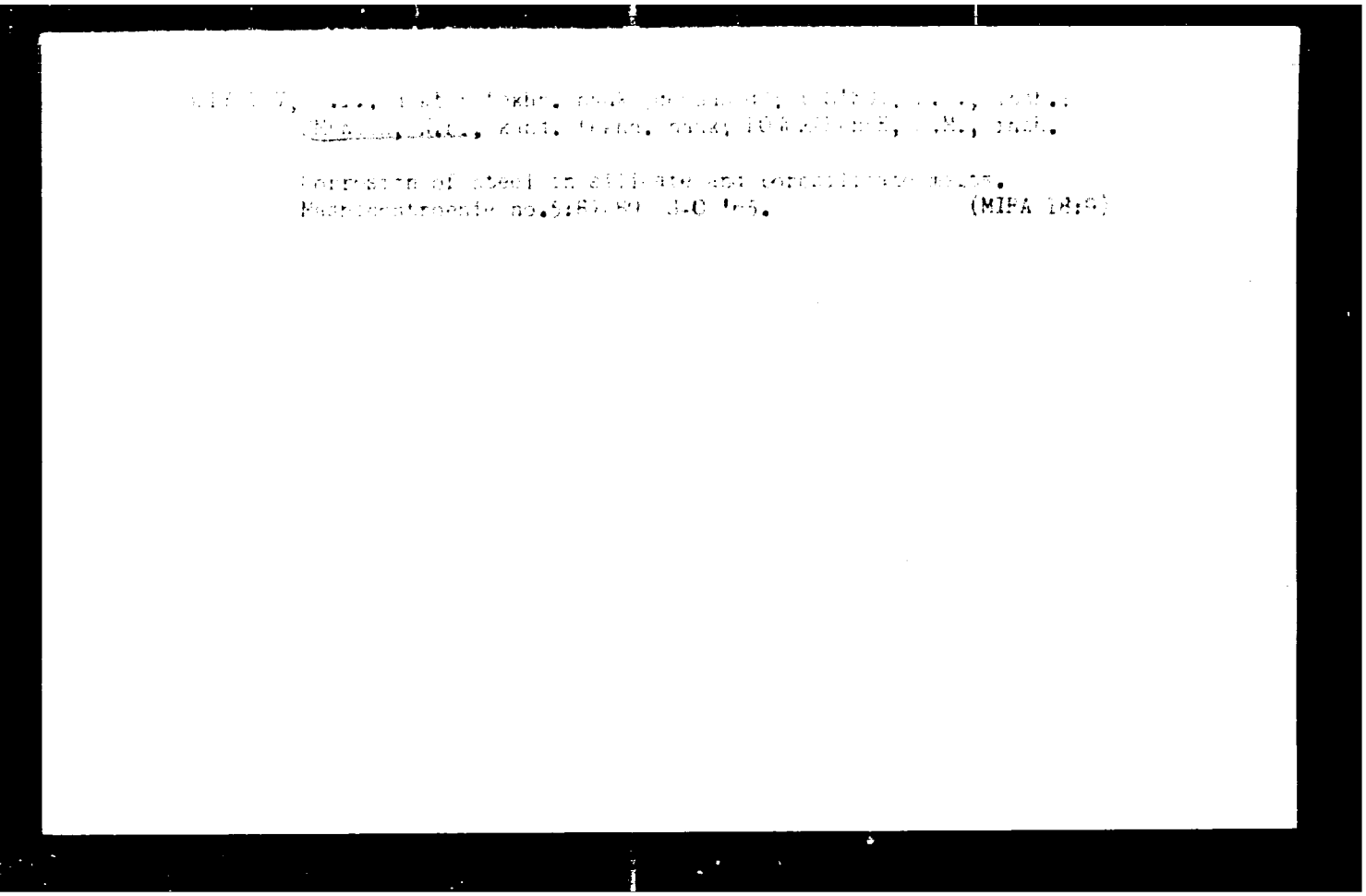
L 36367-66

ACC NR: AR6012431 2

consisting of glass with additions of Fe or Cu powder greatly expand. The solubility of Fe oxides decreases with increased glass acidity. In pure B_2O_3, Fe oxide is almost insoluble, which shows the incompatibility of Fe_2O_3 with molten borate glass. It is shown that the method of electromotive forces can be applied to determine the relative acidity of borate glasses. Bibliography of 10 titles. Authors' summary. [Translation of abstract] [NT]

SUB CODE: 11/

Card 2/2



KAYBICHEVA, M.N.; MAR'YEVICH, N.I.; TULIN, N.A.; SMAKOTIN, I.V.; LANDE, P.A.; TEREKHINA, P.Ya.

Service of unburned magnesite-chromite adapter bricks in electric furnace walls. Metallurg 7 no.8:16-18 Ag '62. (MIRA 15:9)

1. Vostochnyy institut ogneuporov i Chelyabinskiy metallurgicheskiy zavod.
(Electric furnaces) (Refractory materials)

SMAKOV, M.M.

Conference on the automation of processes in the chemical industry.
Khim.prom.no.6:381-382 S '56. (MLRA 10:2)
(Automatic control)

8(0), 5(0) SOV/112-59-4-7664

Translation from: Referativnyy zhurnal. Elektrotekhnika, 1959, Nr 4, p 174 (USSR)

AUTHOR: Smakov, M. M.

TITLE: Special Devices and Means of Automation in the Soviet Chemical Industry

PERIODICAL: V sb.: Avtomatiz. khim. i koksokhim. proiz-v. M., Metallurgizdat, 1958, pp 249-297

ABSTRACT: The following special devices and automatic means developed by OKBA, MKhP, UNIIKhIM, and GIPKh are described: PGF portable gas analyzers, SGG2-V2-B and SGG2-V4A automatic signaling devices, TKhG-5 thermochemical gas analyzers, DPG5-52 depolarization-type gas analyzer for oxygen, EKhG-2 and EKhG-3 electrochemical analyzers, TKG-4 and TKG-5 thermoconductometric gas analyzers, GE-U2 electric gas analyzer, magnetic gas analyzers for oxygen, AFK-3 photoelectric colorimeter, GIP-5 IF-absorption gas analyzer, LLPU-2 laboratory-type pH-meter with a glass electrode, KSO-3 sulfuric-acid and oleum concentration meter, SK-4 effluent-

Card 1/2

SOV/112-59-4-7664

Special Devices and Means of Automation in the Soviet Chemical Industry

acidity signaling device, PM piezometric density meters for liquids, KRP neutralization controller, PIR-2M, PIR-3, and PIR-4 pneumatic rate-of-flow indicators, RM-1, RM-3, and RM-4 slot-type piezometric discharge meters, EMID-4 low-pressure instruments, RUP1-320 level controller for high-pressure tanks, KFM, PMK-320, and KNM-50s regulating valves. Fifty-two illustrations. Bibliography: 7 items.

A.A.S.

Card 2/2

SMIRNOV, N. A.

Osnovi Voyennc Morskogo Dela (Fundamentals of Naval Science), Moscow, 1947.

SMAKOVSKIY, L.I.

Transportation of sugar beets and bagasse in containers.
Sakh.prom.30 no.6:35-36 Je '56. (MLRA 9:9)

1.Dubovyazovskiy sakharnyy zavod.
(Sugar beets--Transportation) (Containers)

S/032/62/028/003/017/017
B104/B102

AUTHOR: Smakovskiy, V. Ye.

TITLE: Ballistic ram impact machine for testing pure bending under impact

PERIODICAL: Zavodskaya laboratoriya, v. 28, no. 3, 1962, 369-373

TEXT. The ram impact machine described has a maximum impact energy of 10 kgm. It consists of a stand, a ram, an antiram, and a clamping device with an arrangement for optical recording of vibrations during impact. The angle through which the ram is shifted before a run is indicated by a pointer in the usual way. After the ram has impinged upon the test piece, the antiram is shifted from its normal position through a certain angle. This angle is also indicated by a pointer. The test pieces can be subjected to an initial static load in the clamping device. The test pieces are fixed in the bushings of the clamping device by means of their conical heads (Fig. 2, Table). The arrangement for the optical recording of the process of impact consists of a light source, a metal mirror mounted on one of the bushings of the clamping device, and a camera. Inside the card 1/3

camera there is a drum 35 mm in diameter and 180 mm long. This drum is driven by an electric motor at the following circumferential speeds: 0.22, 0.33, 0.44, and 0.55 m/sec. The light coming from the mirror passes through a shutter, falls on a lens, and is transmitted to the drum The deviations of the light beam produced by vibrations during the impact are recorded on a photographic film on the drum of the camera. The recording device is calibrated by means of static deformations. There are 5 figures, 1 table, and 5 references. 4 Soviet and 1 non-Soviet. The reference to the English-language publication reads as follows: B. W. Boutwell. The Oxford impact machine, Engineering, 140, 54 (1935).

ASSOCIATION. Institut stroitel'noy mekhaniki Akademii nauk USSR (Institute of Construction Mechanics of the Academy of Sciences UkrSSR)

Fig. 2 Dimensions of test pieces in mm.
Table. Dimensions of test pieces.

Card 2/3

SMAL', S.

Adjusting sleeves on electric filters. Stroitel' 2 no.11:12-13 N'56. (MIRA 10:1)

(Blast furnaces) (Electric filters)

SMAL', S.I., izhener; SHELOMOV, B.Ye., inzhener.

Using trolley wires as a power supply for gantry crane motors.
Mekh.stroi. 13 no.10:23-24 O '56. (MLRA 9:11)
(Cranes, derricks, etc.)
(Electric lines--Overhead)

SMAL', S.I.

Semiautomatic sling ropes for mounting steel and reinforced concrete construction elements. Stroi.prom.34 no.7:11-15 Jl '56. (MLRA 9:9)

1.Glavnyy mekhanik tresta Uralstal'konstruktsiya.
(Wire rope) (Hoisting machinery)

ARTOBOLEVSKIY, A. (Minsk); SMAL', V. (Minsk).

"Victory"; motion-picture theater in Minsk. Kinomekhanik no. 1: 1:7-8 Ja '55. (MLRA 8:2)
(Minsk--Motion-picture theaters)

Synthesis of (ethylenedinitrilo)tetraacetic acid (EDTA) and the determination of the hardness of water by means of the disodium salt (Complexon III)? J. Chrząszczewski, Z. Smal, and L. Walendziuk (Univ., Łódź, Poland). *Zeszyty Nauk. Univ. Łódz. Ser. II*, No. 2, 77–88(1956)(English summary).—The Schwarzenbach-Ackermann synthesis of EDTA (*C.A.* 42, 6696f) was investigated in relation to amts. of reactants, temps., and pH. The recommended procedure is: a soln. of 31 g. HCl (I) in 100 ml. H_2O is neutralized with NaOH and 142 ml. H_2O added. To a soln. of 106 g. $ClCH_2CO_2H$ in 200 ml. H_2O, neutralized with NaOH, is added 375 ml. H_2O, the whole warmed to 90°, and I added with vigorous stirring. A satd. soln. of 45 g. NaOH is introduced slowly and dropwise at 80–100° under stirring, allowed to stand 30 min., cooled, and HCl added to pH 1–2. After a few min. BDTA crystallized from the H_2O (yield 67–8%). Complexon III was used to det. water hardness by routine methods. J. Stecki

5
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L 41976-65 EWT(m)/EWC(m) Peb DIAAP RWH/RM

ACCESSION NR: AP5012525 PO/0046/64/009/009/0733/0744

AUTHOR: Smal, Zbigniew (Smal', Z.); Bulanda, Jan (Bulyanda, Ya.); Horski, Jozef (Gorski, Yu.); Siemaszko, Aleksander (Semashko, A.)

TITLE: Sorption of radioactive isotopes on certain ionites

SOURCE: Nukleonika, v. 9, no. 9, 1964, 733-744

TOPIC TAGS: isotope, ion exchange, water sanitation, radioactive contamination

Abstract: The article reports on the study of some Polish and Soviet ion-exchange materials to determine their suitability for decontaminating drinking water from radioactive isotopes. The apparatus is described with which the total exchange capacity and the percent sorption were measured. The experimental procedure is described also, namely the simulation of water, the mixing and diluting of disintegration products and carriers, and the build-up of columns with gravel or steel filings. All the tested ionites (Polish-made cationites MK2, MK3, Esscarbo; Russian-made anionite EDE-10-P) were found satisfactory. The effect that the velocity of passage through the column has on the

Card 1/2

L 41976-65

ACCESSION NR: AP5012525

sorption efficiency is established on the basis of measurements. It is also found, that the decontaminated water is still not palatable on account of saline deficiency.

Orig. art. has 2 figures, 1 graph, and 7 tables.

ASSOCIATION: Instytut Badan Jadrowych, Pracownia Specjalna, Warsaw (Special Laboratory, Institute of Nuclear Research)

SUBMITTED: 19Nov63 ENCL: 00 SUB CODE: NP, GO

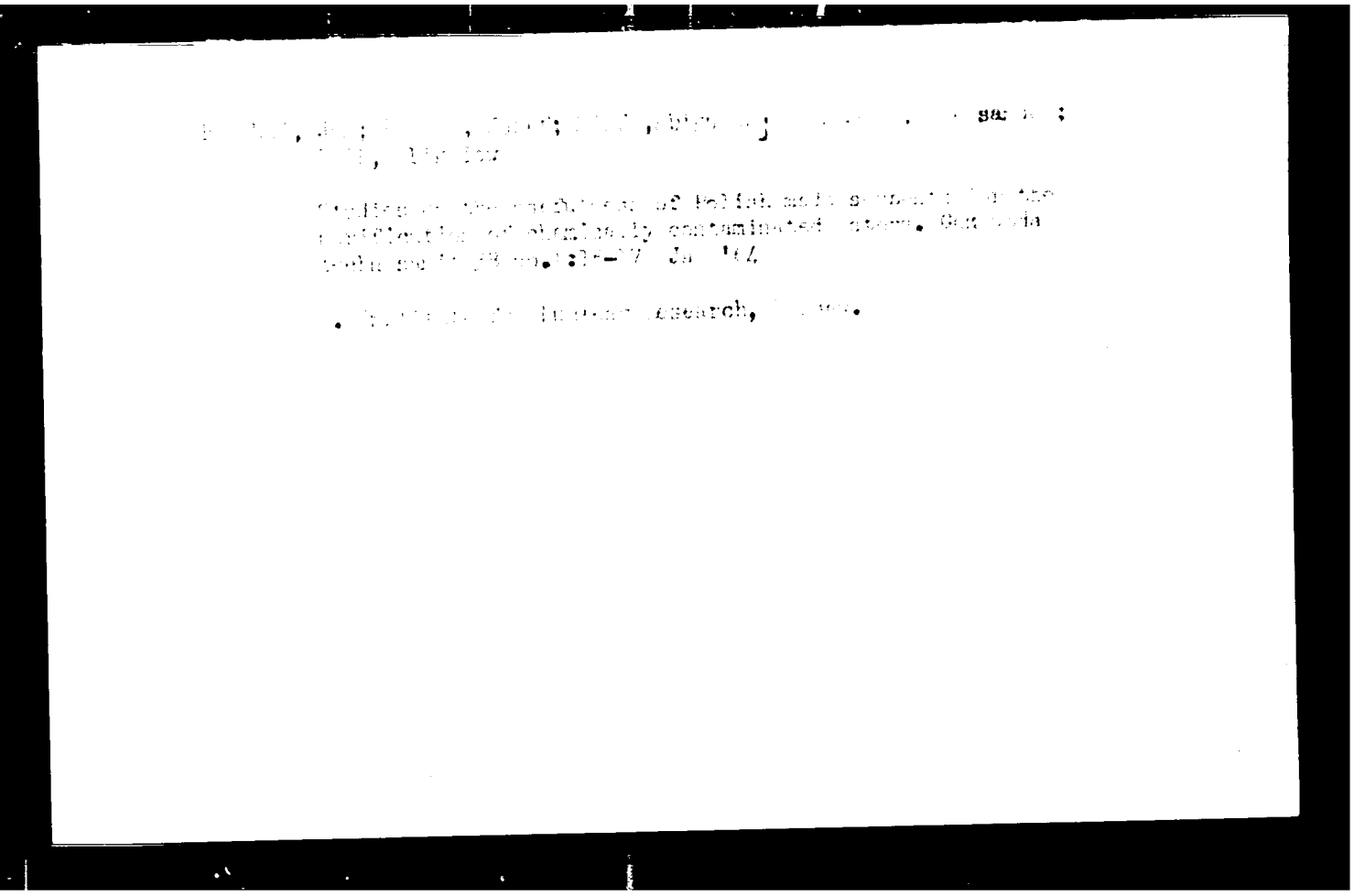
NO REF SOV: 001 OTHER: 005 JPRS

Card 2/2

SMAL, Zbigniew; BULANDA, Jan; HORSKI, Jozef; SIEMASZKO, Aleksander

Sorption of radioactive isotopes on certain ionites.
Nukleonika 9 no.9:733-744 '64.

1. Special Laboratory, Institute of Nuclear Research,
Polish Academy of Sciences, Warsaw.



SMAL , Zbigniew; MILANDA, Jan; WOJSKI, Jozef; SIEMASZKO, Aleksander

Laboratory experiments in decontaminating surface waters by mixing sorbents. Gaz woda i tech sanit 38 no.3:74-78 Mr '64

1. Institute for Nuclear Research, Zeran Branch.

SMALC, A.

Nomenclature of inorganic chemistry. Vest Slov kem dr 8 no.1/2:17-27 Ja-Je '61.

1. Nuklearni institut "J. Stefan," Ljubljana.

SLIVNIK, J.; BRCIC, B.; VOLAVSEK, B.; SMALC, A.; FRLEC, B.; ZEMLJIC, R.; ANZUR, A.; VEKSLI, Z.

On the synthesis of, and magnetic measurements on, xenon tetrafluoride. Croat chem acta 34 no.3:187-188 '62.

1. "Jozsef Stefan" Institute for Nuclear Research, Ljubljana, Slovenia, Yugoslavia (for Slivnik, Brcic, Volavsek, Smalc, Frlec, Zemljic, and Anzur.) 2. Institute "Ruder Boskovic", Zagreb, Croatia, Yugoslavia (for Veksli).

SLIVNIK, J.; SMALC, A.; ZEMLJIC, A.

80-ampere electrolytic cell for the obtainment of elementary fluorine. Vest Slov kem dr 9 no.3/4:61-64 J1-D '63.

1. Nuklearni institut "Jozef Stefan", Ljubljana.